DIALIX® R Feline DIALIX® R Canine

Complete Action Dietary Supplements Formulated in Highly Palatable Chews for Cats and Dogs with Chronic Renal Disease.

Animals affected by Chronic Renal Disease (CRD) show a progressive and irreversible loss of renal function. The kidneys lose their ability to perform the glomerular filtration and excretory function, concentrate urine and maintain appropriate levels of electrolytes.

CRD is more common in older animals and in certain breeds. In dogs there is an increased predisposition in Cocker Spaniels, Terriers, Beagles, Golden Retrievers and Shih-Tzus. In cats there is a higher incidence in Persian, Somali, Himalaya and Abyssinia breeds.



Active ingredients (per soft chew):

	Feline	Canine	u.m.		Feline Canine u.m.		
Astragalus membranaceus	15	120	mg	Vitamin B ₁ (Thiamine)	1	8	mg
Rehmannia glutinosa	12,5	100	mg	Vitamin B ₂ (Riboflavin)	1	8	mg
Urtica dioica	12,5	100	mg	Vitamin B ₆ (Pyridoxine)	2	16	mg
Cordyceps sinensis	12,5	100	mg	Vitamin B ₉ (Folic acid)	45	360	mcg
L-Arginine	12,5	100	mg	Vitamin B ₁₂ (Cobalamin)	13,75	110	mcg
N,N-dimethylglycine (DMG)	6,25	50	mg	Inositol (Previously Vit Bm)	2	16	mg
DHA (Omega-3)	3,6	30	mg	Choline (Previously Vit Bp)	1	8	mg
EPA (Omega-3)	5,25	45	mg	Potassium (K)	2,05	16,5	mg
Lecithin	12,5	100	mg	• •			_

Composition (in descending order): Starch, chicken flavour, water, brewer's yeast, oatmeal, barley, rice and rye, soya lecithin, sweetener (maltodextrin, sodium alginate, calcium sulphate), glycerin, oats, fish oil concentrate, *Astragalus membranaceus*, vitamin B₁₂, L-arginine, *Urtica dioica, Cordyceps sinensis, Rehmannia glutinosa*, DMG HCl, potassium citrate, propionic acid, sorbic acid, pyridoxine HCl, inositol, natural tocopherol mixture, choline chloride, riboflavin, thiamine mononitrate, folic acid. Essential nutritional characteristics: Low phosphorus content and limited protein content, but high quality.

Analytical constituents (Feline/Canine): Protein 15.6/14.5%; fat content 10.15/9.96%; crude fibre 1.14/0.81%; crude ash 6.25/4.20%; moisture 17.64/18.42%; calcium 0.17/0.19%; phosphorus 1.25/0.80%; sodium 1.53/1.58%; potassium 0.59/0.71%; essential fatty acid content 0.88/0.87% (EPA) and 0.6/0.58% (DHA).

Mechanism of action: The active ingredients in DIALIX[®] R Feline and Canine help maintain renal function in cats and dogs due to their triple action:

- RENAL PROTECTOR: Omega-3 (EPA and DHA fatty acids), *Rehmannia glutinosa, Astragalus membranaceus, Cordyceps sinensis*, L-Arginine, DMG, Choline, Inositol and Lecithin.
- DIURETIC: Urtica dioica, Rehmania glutinosa, Vitamin B₆ and Choline.
- REPLENISHER OF VITAMINS AND MINERALS lost due to high diuresis: Vitamins B₁, B₂, B₆, B₉ (folic acid), B₁₂ and Potassium.
 - EPA and DHA (Eicosapentaenoic and Docosahexaenoic): It has been shown that the Omega-3 slows the deterioration in the glomerular filtration rate in dogs. This may be because it mitigates the capillary pressure in the glomerulus (Brown 1998, 2000),^{1,2} or because it minimises the formation of lipoproteins which damage endothelial and mesangial cells. The supply of Omega-3 which DIALIX® R contains reinforces the renal diet indicated in this pathology.
 - Rehmannia glutinosa: An increase in the capacity of creatinine elimination, sodium excretion and





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Features

Contains a wide range of renal protectors, vitamins, amino acids and minerals that help maintain good renal function and electrolyte balance.

Triple action: Renal protector, Diuretic and Replenisher of vitamins and minerals.

Highly palatable soft chews, facilitate daily intake.

Ideal supplement for renal diets.

Available exclusively through veterinarians.



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urine osmolarity have been proven in studies performed on rats with renal damage (Kang 2005).³ It has also been shown to reduce azotemia, hyperglycemia and histopathological changes at the renal level in rats with nephropathic diabetes (Yokozawa, 2004).⁴ In humans it has been seen that administration of *Rehmannia glutinosa* together with *Astragalus membranaceus* enables a significant clinical improvement in renal function (Su, 1993).⁵

- **Astragalus membranaceus**: Animal studies have shown that it reduces renal fibrosis and hypertension. Testing on humans shows that it favours creatinine elimination and it reduces proteinuria (Peng. 2005).⁶
- Cordyceps sinensis: It has been shown to improve renal function in people with CRD
 (Wojcikowski, 2004),⁷ (Guam, 1992).⁸ It has an antioxidant effect that protects against the
 toxicity of aminoglycosides.
- Urtica dioica: Stimulates and favours the immune system, circulation, detoxifying functions and balanced fluid retention.
- L-Arginine: The reduction in the production of nitrous oxide (N₂O) due to the production of inflammatory cytokines in CRD produces hypertension which reduces renal function. Thanks to L-Arginine there is increased production of N₂O, which lowers blood pressure and increases the glomerular filtration rate, thereby improving symptoms (Aiello, 1997).^{9,10}
- DMG: Helps reduce the high homocysteine levels associated with renal dysfunction.
- Choline, Inositol and Lecithin: Have a lipotrophic action that results in renal and hepatic protection.
- Vitamins B₁, B₂, B₆, B₉ y B₁₂: These are water-soluble vitamins that are easily lost with renal dysfunction, consequently supplementation is necessary.
- **Vitamin B**₁: With antioxidant effect, it helps maintain the metabolism of fats, carbohydrates and proteins for proper energy production.
- $\mbox{Vitamin B}_2$: Found in high concentrations in the liver, kidneys and heart. Its antioxidant action helps the optimal energy production and excretory function of the kidneys.
- **Potassium**: Animals with CRD and polyuria frequently present hypokalemia. Supplementation with potassium is important to be able to maintain proper electrolyte balance.

Indications: Long term maintenance of renal function in cats and dogs with Chronic Renal Disease.

Target species: Cats and dogs.

Directions of use:

- DIALIX® R Feline: 1 chew per 2 kg body weight, once a day or divided into two separate doses (morning and evening).
- DIALIX® R Canine: 1 soft chew per 15 kg body weight, once a day or divided into two separate doses (morning and evening).

Warnings: VetNova is a pioneer in the development of Chews technology to facilitate administration of supplements to cats and dogs. Unlike tablets, capsules, etc. which are administered in a "forced" manner to the mouth to ensure the product is taken, Chews should be administered freely in the pet's bowl and the pet left to take them voluntarily. Some shy cats and dogs may need a longer time to fully accept them, but once they do the daily intake is easier and more satisfactory. The following strategies can be used during the first week to facilitate initial acceptance: 1) Reduce the dose and gradually increase it, 2) Divide the daily dose into two separate doses (morning and evening), 3) Crush the chew and mix it with malt (cats), pate or any food which the pet enjoys, etc.





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• DIALIX® R Feline: 120 Chews • DIALIX® R Canine: 30 Chews

Supporting materials:

- Quick Reference Guide (DIALIX® line)
- Magazine advertising (DIALIX® line)
- DIALIX® B Tech Sheet
- DIALIX® Lespedeza Tech Sheet
- DIALIX® V Tech Sheet
- · Compilation of published research articles (abstracts).

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